TITLE 83: PUBLIC UTILITIES

CHAPTER I: ILLINOIS COMMERCE COMMISSION

SUBCHAPTER C: ELECTRIC UTILITIES

PART XXX

INTERCONNECTION OF DISTRIBUTED GENERATION EQUIPMENTRESOURCES
TO ELECTRIC UTILITY DISTRIBUTION SYSTEMS

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AUTHORITY: Implementing Section 9-241 and authorized by Section 10-101 of the Public Utilities Act [220 ILCS 5/9-241 and 10-101].

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Section XXX.010 Definitions

"Affected Systems" means any electric system not owned or operated by the interconnection provider, that is either directly or indirectly connected to the interconnection provider's electric system and could be adversely affected by the interconnection and parallel operation of the interconnection customer's distributed resource.

"Agreement" means an interconnection and parallel operation agreement for a distributed resource by and between the interconnection provider and the interconnection customer.

"Business Day" means Monday through Friday except for State of Illinois holidays.

"Distributed Resource" means equipment that can become a source of electric power, including but not limited to generators and/or energy storage technologies.

"Electric System" means an electric transmission or distribution system.

"Facilities Study" means a study, executed in accordance with Section XXX.120 that determines specific changes to the electric transmission or distribution system(s) necessary to interconnect distributed generation equipment, and to determine the cost of those changes. The facilities study shall also include suggested changes to the <u>linterconnection</u> customer's proposed distributed resource if the interconnection provider believes these changes would reduce interconnection costs.

"Feasibility/Impact Study" –means a study, executed in accordance with Section XXX.110 that identifies the effect(s) of interconnecting a distributed resource to an interconnection provider's electric system, including identification of potential violations and the effect the interconnection would have on system reliability. The feasibility/impact study also estimates the magnitude of costs associated with facilities and/or system modifications necessary for completing the interconnection.

"FERC" means the Federal Energy Regulatory Commission

"IEEE" means Institute of Electrical and Electronics Engineers, Inc., a non-profit technical professional organization with members in 150 countries, responsible for technical publishing, conferences, and consensus-based standards activities.

"Interconnection Customer" means any entity proposing to interconnect a distributed resource to an interconnection provider's system or any entity that has entered into a valid interconnection agreement with an interconnection provider.

"Interconnection Provider" means a public utility as defined by the Public Utilities Act [220 ILCS 5], that owns and/or operates an electric system to which the interconnection customer desires to interconnect a distributed resource, or has interconnected a distributed resource.

"Line Section" means a section of the distribution system between two sectionalizing devices in the area electric power system.

"Parallel Operation" means the operation of a distributed resource connected to an interconnection provider's electric system for a period of six (6) or more cycles.

"Point of Common Coupling (PCC)" –means the point at which the interconnection between the interconnection provider's system and the interconnection customer's distributed resource interface occurs.

<u>"Radial Distribution Circuit"—means</u> a distribution line that branches out from a substation and is normally not connected to another substation or another circuit sharing the common supply of electric power.

"UL" means Underwriters Laboratory, Inc., an independent, not-for-profit product safety testing and certification organization operating in Canada, Europe, Asia, Latin America, and the U.S.A.

"Violation" means a condition on an electric transmission or distribution system that, based on established planning and operation standards, is considered unacceptable by the owner and/or operator of the system.

Section XXX.020 Purpose

Thise Part states the terms and conditions that govern the interconnection and parallel operation of distributed resources in order to give all Illinois electric customers the ability to utilize distributed resources.

Section XXX.030 Applicability

- a) All interconnection providers are required to adhere to the provisions in this Part. The interconnection procedures in this Part are available to interconnection customer's proposing to interconnect distributed resources to the interconnection provider's electric distribution system. This Part applies to all distributed resource interconnections operating in parallel to an interconnection provider's electric system except those interconnections within the exclusive jurisdiction of the FERC. This Part does not apply to distributed resources that are operated in isolation from an electric system.
- Neither these procedures nor the requirements included in this Part apply to distributed resources interconnected or approved for interconnection with electric systems prior to 60 business days after the effective date of this Part.

Section XXX.040 <u>Terms of Interconnection Agreement</u>

- a) The interconnection provider shall issue an interconnection agreement to the interconnection customer if:
 - Tthe interconnection provider receives a completed application from the interconnection customer in accordance with Section XXX.050; and

- the interconnection customer's proposed distributed resource meets the specifications in IEEE 1547-2003 (2003 edition, approved July 28, 2003, published by the Institute of Electrical and Electronics Engineers, Inc., 3 Park Avenue, New York, NY 10016-5997. No later amendments or additions are incorporated-, and the linterconnection customer passes the primary screening criteria in Section XXX.070 and/or secondary screening criteria in XXX.080; or
- the interconnection customer's proposed distributed resource undergoes a feasibility/impact study under Section XXX.110 and, if necessary, a facilities study under Section XXX.120 and the interconnection provider determines that the distributed resource can be interconnected safely and reliably following modifications to the interconnection provider's facilities, modifications to an affected system, and/or modifications to the interconnection customer's facilities, or no modifications whatsoever.
- b) Any requirement by the interconnection provider for the interconnection customer's proposed interconnection to deviate from the specifications in IEEE 1547-2003 shall be fully explained and supported in a document that identifies the interconnection provider employee capable of responding to any inquiry regarding the requirement.

Section XXX.050 Application for Interconnection

- a) To assist an interconnection customer in the interconnection process and in accordance with Section XXX.140, the interconnection provider shall designate an employee or office from which information on the application process and on the interconnection provider's electric system shall be obtained through informal requests from the interconnection customer presenting a proposed project for a specific site. System information provided to interconnection customers shall include relevant system studies, interconnection studies, and other materials useful to an understanding of an interconnection at a particular point on the system. The interconnection provider shall comply with requests for such information if the interconnection customer agrees to comply with applicable confidentiality requirements.
- b) The interconnection customer shall submit an application to the interconnection provider's designated employee or office in the form in Appendix B for single-phase equipment 20 kVA or smaller, or in the form in Appendix C for single phase equipment larger than 20 kVA or for three-phase equipment of any size. Applications shall be date and time-stamped upon receipt. The original date and time-stamp applied to the

application at the time of its original submission for interconnection shall be accepted as the qualifying date-and time-stamp for the purposes of any timetable in this Part. The interconnection provider shall issue a notification of receipt to the interconnection customer within three business days after receipt of receiving the interconnection customer's application. The interconnection provider shall issue a notifyication to the interconnection customer, within ten business days after the receipt of the application, whether that the application is either complete or incomplete. Submissions and notices under this Section shall be satisfied by electronic mail, facsimile, U.S. Mail, or another mutually agreed upon method.

- c) If the application is incomplete, the interconnection provider shall provide along with the notice that the application is incomplete, a list detailing all information that must be providednecessary to complete the application. The interconnection customer shall have 10-twenty business days after receipt of the notice to submit the listed information—or to request an extension of time, not to exceed 30 days, to provide the listed information. If the interconnection customer does not provide the listed information or a request for an extension of time—within the 10-twenty business day deadline, the application shall be deemed withdrawn. An application shall be considered complete upon submission of the listed information to the interconnection provider.
- d) Certain applications may require minor modifications while being reviewed by the interconnection provider. Such minor modifications to a pending application shall not require the filing of a new application. Any proposed modification to machine data or equipment configuration or to the interconnection site of the distributed resource by the interconnection customer not agreed to in writing by the interconnection provider and the interconnection customer shall be deemed a withdrawal of the application and shall require submission of a new application. However, when it is mutually agreed that machine data or equipment configuration modifications shall have no significant effect on the distributed resource interconnection, the interconnection provider shall not require the interconnection customer to submit a new application.
- e) The interconnection provider shall treat the application and any communications concerning the nature of proposed distributed resource interconnection confidentially. The interconnection provider shall not use knowledge of proposed distributed resource projects submitted to it for interconnection or study to prepare competing proposals to the interconnection customer that offer either discounted rates in return for not installing the distributed resource, to offer competing proposals to install distributed resource, or for any purpose other than facilitating the application and interconnection processes. The interconnection provider

- is prohibited from shall not shareing any confidential information about proposed small distributed resource interconnections with its affiliates, or any third party other than the interconnection customer.
- f) The interconnection provider shall process all applications in a nondiscriminatory manner. Applications shall be processed in the order that they are determined to be complete.
- g) The interconnection customer shall submit proof of site control to the interconnection provider with its distributed resource interconnection application.— Site control shall be demonstrated through:
 - a recorded deed, recorded lease or recorded agreement proving ownership of, a leasehold interest in, or a right to develop a site for the purpose of constructing a distributed resource; or
 - 2) a recorded option to purchase/acquire a site and/or a leasehold interest in a site for such purpose.
- h) Interconnection provider shall assess no administrative charges to interconnection customer for handling the interconnection application.
- i) Submissions and notices under this Section shall be satisfied by electronic mail, facsimile, U.S. Mail, or another mutually agreed upon method.

Section XXX.060 Initial Review

- within fifteen business days after the interconnection provider notifies the interconnection customer of receipt of the received a completed application, the interconnection provider shall perform an initial review using the primary and secondary screening criteria set forth in Section XXX.070 and Section XXX.080 respectively. And Upon completion of the initial review, the interconnection provider shall provide written notificationy to the interconnection customer of the results in accordance with Section XXX.090. and include with the notification shall include copies of the initial review results, analysis, results and data underlying the interconnection provider's determinations under the screens.
- Interconnection providers shall file tariffs that include rates for the initial review. These rates shall be differentiated by the nameplate capacity of the generator being interconnected and characteristics of the circuit at the proposed point of interconnection.

Section XXX.070 Primary Screening Criteria

The primary screens required in this section include the following:

- a) For interconnection of a proposed distributed resource to a radial distribution circuit, the aggregated generation, including the proposed distributed resource generation capacity, on the circuit shall not exceed 5% of the total circuit annual peak load, or 20% of the total circuit annual minimum load, whichever is less, as most recently measured at the substation.
- b) For interconnection of a proposed distributed resource to the load side of spot network protectors, the proposed distributed resource must utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5% of a spot network's maximum load or 50 kW.
- c) The proposed small resource shall not be connected on the load side of a secondary network protector, except as allowed under subsection (b) for a spot network.
- d) The proposed distributed resource, in aggregation with other generation on the distribution circuit, shall not contribute more than 10% to the distribution circuit's maximum short circuit current at the point on the high voltage (primary) level nearest the proposed point of common coupling.
- e) The proposed distributed resource, in aggregate with other generation on the distribution circuit, shall not cause any distribution protective devices and equipment (including but not limited to substation breakers, fuse cutouts, and line reclosers), or interconnection customer equipment on the system to exceed 85% of the short circuit interrupting capability; nor is the interconnection proposed for a circuit that already exceeds 85% of the short circuit interrupting capability.
- f) The proposed distributed resource, in aggregate with other generation interconnected to the distribution low voltage side of the substation transformer feeding the distribution circuit where the interconnection customer proposes to interconnect the distributed resource, shall not exceed 10 MW in an area where there are known or posted transient stability limitations to generating units located in the general electrical vicinity (e.g., 3 or 4 voltage level busses from the voltage at the point of interconnection).
- g) For interconnection of a proposed single-phase distributed resource where theto a primary distribution system that is three-phase, four-wire, the distributed resource shall be connected line-to-neutral. At any point of common coupling, the single-phase generation connected to any one

phase shall not exceed the greater of 10% of the minimum feeder load or 167 kVA. For interconnection of a proposed single-phase distributed resource where theto a primary distribution system that is three-phase, three-wire, the distributed resource shall be connected line-to-line. At any point of common coupling, the single-phase distributed resource connected shall not exceed the greater of 10% of the minimum feeder load or 167 kVA.

- h) For interconnection of a proposed three-phase distributed resource to a three-phase four-wire distribution circuit or a distribution circuit having mixed three-wire and four-wire sections, the aggregate generation capacity including the proposed distributed resource shall not exceed 10% of line section peak load.
- i) If the proposed distributed resource is to be interconnected on singlephase shared secondary, the aggregate generation capacity on the shared secondary, including the proposed distributed resource, shall not exceed 20 kVA.
- j) If the proposed distributed resource is single-phase and is to be interconnected on a center tap neutral of a 240 volt service, its addition shall not create an imbalance between the two sides of the 240 volt service of more than 20% of nameplate rating of the service transformer.
- k) The proposed distributed resource's point of common coupling shall not be on a transmission line.

Section XXX.080 Secondary Screening Criteria

The secondary screens include the following:

- a) For interconnection of a proposed distributed resource to a radial distribution circuit, the new distributed resource's capacity in aggregate with other generation on the circuit shall not exceed 15% of total circuit peak load, or 50% of the total circuit annual minimum load, whichever is less, as most recently measured at the substation; nor shall it exceed 15% of a distribution circuit line section annual peak load, or 50% of the distribution line section annual minimum load, whichever is less.
- b) For interconnection of a proposed distributed resource to the load side of spot network protectors, the proposed distributed resource shall utilize an inverter-based equipment package and, together with the aggregated other inverter-based generation, shall not exceed the smaller of 5% of a spot network's maximum load or 50 kW.-

- c) For the interconnection of a proposed distributed resource to any network, the distributed resource must utilize a protective scheme that ensures that its current flow shall not affect the network protective devices including reverse power relays or a comparable function. Synchronous distributed resources shall not be interconnected to a network.
- d) For interconnection of a proposed distributed resource that is an induction generator or that utilizes inverter-based protective functions, both of which include reverse power relay functions, the distributed resource's total net generating capacity, in aggregate with other distributed resources interconnected on the load side of network protective devices, does not exceed the lesser of 10% of the minimum load on the network or 50 kW. A distributed resource does not export to any network.
- e) The proposed distributed resource, in aggregation with other generation on the distribution circuit, shall not contribute more than 10% to the distribution circuit's maximum fault current at the point on the high voltage (primary) level nearest the proposed point of common coupling.
- f) The proposed distributed resource *in aggregate* with other generation on the distribution circuit shall not cause any distribution equipment, protective devices (including but not limited to substation breakers, fuse cutouts, and line reclosers), or interconnection customer equipment on the system to exceed 90% of their short circuit interrupting capability; nor is the interconnection proposed for a circuit that already exceeds the 90% short circuit interrupting capability limit.
- g) The proposed distributed resource's point of common coupling shall not be on a transmission line.

Section XXX.090 Results of Initial Review

- a) If the initial review determines that the proposed interconnection passes the primary screening criteria, then the interconnection application shall be approved and the interconnection provider shall issue the interconnection customer an executable interconnection agreement within fiveten business days after the determination.
- b) If the initial review determines that the proposed interconnection passes the secondary screening criteria and fails the primary screening criteria, then:
 - 1) <u>but the the</u> interconnection provider <u>shall</u> determines through the initial review that the distributed resource may nevertheless be interconnected consistent with safety, reliability, and power quality

standards, <u>and</u> the interconnection provider shall issue the interconnection customer an executable interconnection agreement within <u>five-ten</u> business days after the determination; <u>or</u>

- d) If the initial review determines that the proposed 2) interconnection fails the primary screening criteria and passes the secondary screening criteria, but the interconnection provider shall determines from the initial review that the distributed resource cannot be interconnected consistent with safety, reliability, and power quality standards unless the interconnection customer is willing to consider modifications to the distributed resource. The interconnection provider shall describe, in writing or through electronic mail within 10 business days after the determination, -the issues to be addressed prior to the distributed resource interconnection. The interconnection provider shall include copies of data and analyses results underlying the interconnection provider's determination of the need for distributed resource Within thirty business days of receipt of modifications. interconnection provider's list of issues to be addressed, the interconnection customer shall provide written notification agreeing to address the issues raised by the interconnection provider. The interconnection provider shall forward an executable interconnection agreement to the interconnection customer within 10 business days after receipt of confirmation that the interconnection customer has agreed to make the necessary changes to the distributed resourceinterconnection customer's facilities at the interconnection customer's cost; or-
- If the initial review determines that the proposed interconnection €3) fails the primary screening criteria and passes the secondary screening criteria, but the interconnection provider shall determines from the initial review that the distributed resource cannot be interconnected consistent with safety, reliability, and power quality standards unless the interconnection customer is willing to consider modifications to the interconnection provider's system or facilities. tThe interconnection provider shall recommend, in writing or through electronic mail within ten business days after the determination, system or facility modifications necessary for the interconnection customer to interconnect with the interconnection provider's system. These recommendations shall include copies of data and analyses underlying the interconnection provider's determination of the need for system or facilities modifications, a detailed explanation of the necessary system or facility modifications, an estimated time for the completion of the system or facility modifications and a single cost estimate with a binding

maximum value to of the cost to complete the system or facility modifications. The interconnection provider shall provide the interconnection customer with the option to pay the cost estimate to the interconnection provider with or without a final true up to actual costs. Within thirty business days of receipt of interconnection provider's notice of the need for modifications and cost estimate, the interconnection customer mustshall issue payment to the interconnection provider for the system or facility modifications in order to be considered for interconnection. The interconnection customer shall also choose either a binding cost estimate or a cost estimate with final true up. The interconnection provider shall forward an executable interconnection agreement to the interconnection customer within 10 business days of receipt of payment from interconnection customer for system or facility modifications after confirmation that the interconnection customer has agreed to pay for the necessary system or facility modifications to the interconnection provider's system.

c) If the initial review determines that the proposed interconnection fails both the primary and the secondary screening criteria, then the proposed interconnection shall be addressed under Section XXX.100 – Scoping Meeting.

Section XXX.100 Scoping Meeting

The A scoping meeting described in this Section is shall be made available by the interconnection provider to an interconnection customer whose application—for interconnection to the interconnection provider's system fails both the primary and secondary screening criteria—and where the interconnection provider has determined that the distributed generation equipment cannot be interconnected without further studies.

- a) At the request of either party, a scoping meeting shall be held within 10 business days, or as otherwise mutually agreed to by the parties, after the interconnection provider notifies the interconnection customer that the application fails both the primary and secondary screening criteria. The interconnection provider and interconnection customer shall bring to the scoping meeting, or make available via teleconferencing, personnel, including system engineers, and other resources required to accomplish the purpose of the meeting.
- b) The purpose of the scoping meeting shall be to discuss the interconnection customer's interconnection request and to review existing non-confidential studies and information relevant to the interconnection customer's proposed interconnection—request. The parties shall further

discuss whether the interconnection provider should perform a feasibility/impact study in accordance with Section XXX.110. The scoping meeting may be omitted by mutual agreement. If the scoping meeting is omitted, then the interconnection customer shall either withdraw the application for interconnection or the interconnection provider shall issue a feasibility/impact study to interconnection customer in accordance with Section XXX.110. If the parties agree that a feasibility/impact study should be performed, the interconnection provider shall provide the interconnection customer, no later than five business days after the scoping meeting, a feasibility/impact study agreement including an outline of the scope of the study and a cost estimate with a binding maximum value to perform the study.

c) The scoping meeting may be omitted by mutual agreement, in which case the interconnection provider will provide a feasibility/impact study agreement no later than 5 business days after it is agreed to omit the scoping meeting. The feasibility/impact study agreement shall include an outline of the scope of the study and a cost estimate with a binding maximum value to perform the study. In order to remain in consideration for interconnection, the interconnection customer must return the executed feasibility/impact study agreement within 15 business days from the date it is received, in accordance with Section XXX.110, or the interconnection customer's application shall be deemed withdrawn.

Section XXX.110 Feasibility/Impact Study

The feasibility/impact study shall identify the effect(s) of interconnecting the distributed resource to the interconnection provider's system, including identification of potential violations caused by the interconnection, the effect the interconnection would have on system reliability, and to assist in the determination of a cost estimate for any facility modifications required for interconnection.

a) No later than five business days after holding a scoping meeting or mutually agreeing to omit the scoping meeting, interconnection provider shall issue a feasibility/impact study agreement that includes an outline of the scope of the study and a cost estimate to perform the feasibility/impact study. The feasibility/impact study agreement shall provide the interconnection customer with the option to designate the cost estimate or choose a final true up of the cost estimate with actual costs upon completion of the study. The cost estimate shall include a summary of the estimated professional time necessary to complete the feasibility/impact study. Whenever possible, the interconnection provider shall rely on existing studies of recent vintage to model interconnection conditions. The cost estimate shall not include the cost of existing studies; however, the cost estimate shall include an estimate of the cost of any new study or

- modifications to existing studies necessary to perform the feasibility/impact study.
- <u>ab</u>) Within thirty business days of receipt of the feasibility/impact study agreement or another mutually agreed upon time frame, interconnection customer shall return an executed feasibility/impact study agreement along with payment of the estimated cost of the feasibility/impact study. The interconnection customer shall also indicate whether payment is for a binding cost estimate or subject to a final true up with actual costs upon completion of the study. A deposit of 50% of the interconnection provider's binding maximum cost estimate of the feasibility/impact study costs may be required from the interconnection customer within 15 business days from the receipt of the feasibility/impact study agreement. Any study fees shall include a summary of professional time. An Interconnection customer must pay the remainder of the study fees that exceed the deposit within 20 business days after receipt of the invoice or resolution of any dispute but shall pay no more than the interconnection provider's binding maximum cost estimate. If the deposit exceeds the invoiced fees, tlf the interconnection customer chooses a cost estimate with final-true up, then the interconnection provider shall refund or collect the excess difference between the estimated an actual cost without interest amount within 20 business days after the invoice without interest by issuing a refund or receipt for payment with the completed feasibility impact study. In performing the feasibility/impact study, whenever possible, the interconnection provider shall rely on existing studies of recent vintage to model interconnection conditions. The interconnection customer shall not be charged for such existing studies; however, the interconnection customer shall be responsible for charges associated with any new study or modifications to existing studies that are necessary to perform the feasibility/impact study except for amounts that exceed the binding maximum value of the interconnection provider's cost estimate.
- bc) The feasibility/impact study shall include the following analyses:
 - 1) Short circuit analysis: including identification of any equipment short circuit capability limits exceeded as a result of the interconnection;
 - Power flow analysis: including identification of any potential thermal overload or voltage limit violations resulting from the interconnection;
 - Voltage drop and flicker analysis: Lincluding an examination of the expected magnitude and frequency of occurrence;

- 4) Protection analysis: Including coordination studies and identification of necessary changes in equipment, coordination set points, and/or grounding requirements as a result of the interconnection; and
- Cost estimate with a binding maximum value for any system or facility modifications and a time estimate for completion of such modifications, including: a description of all facility and/or system modifications required to interconnect the distributed resource to the interconnection provider's system. The interconnection provider shall describe all functional deficiencies identified that may help the interconnection customer to address potential violations. The estimate shall itemize costs to address all potential violations that are a direct result of the interconnection, including short circuit, power flow, voltage, and protection issues.
- ed) The feasibility/impact study shall consider all generating facilities that, when the feasibility/impact study is performed:
 - are directly interconnected to the electric power distribution system, or
 - 2) are interconnected to affected systems and may have an impact on the interconnection request, or
 - 3) have a pending higher queued <u>interconnection application or a</u> signed and valid interconnection agreement to interconnect to the interconnection provider's system.
- de) A feasibility/impact study shall consider interconnection of the distributed resource regardless of based on its initial indicated purpose in order to avoid the further expense and interruption of operation for reexamination should the interconnection customer later change the purpose.
- ef) If so requested by the interconnection customer at the time of the initial interconnection request, a feasibility/impact study shall consider multiple potential points of interconnection at a proposed project site, at the interconnection customer's cost. If the interconnection customer requests a feasibility/impact study of additional potential points of interconnection after the studies of those in the initial interconnection request have been completed, then the additional requests shall require submission of be treated as a new interconnection applicationrequest in all respects.
- fg) Within 45 business days after the date an authorized feasibility/impact study agreement and deposit payment of cost estimate are received from the interconnection customer, the interconnection provider shall transmit a feasibility/impact study report to the interconnection customer that details

the results of the feasibility/impact study and includes, if requested by the interconnection customer when the feasibility/impact study was executed, a true up of the difference between the actual and estimated cost to perform the feasibility/impact study.

- In instances where the feasibility/impact study shows no potential for electric system violations, the interconnection provider shall within five business days send the interconnection customer either a facilities study agreement, in accordance with Section XXX.120, including an outline of the scope of the study and a cost estimate with a binding maximum value to perform the study, or an interconnection agreement in the event that no facilities study is required for interconnection.
- In instances where a feasibility/impact study shows potential for violations on electric systems that are operated by the interconnection provider, the required remedial action(s) and the estimated binding maximum cost of taking such remedial action(s), including an assignment of costs responsibilities, shall be included in the feasibility/impact study report. If necessary, the interconnection provider shall send the interconnection customer a facilities study agreement in accordance with Section XXX.120.
- 3) When the interconnection provider determines the potential for violations on an affected system, the interconnection provider shall issue to the interconnection customer, no later than at the timeinclude in the feasibility/impact study report is issued, the identity of each affected system found to have potential for violations due to the distributed resource, including contact information for each affected system. The interconnection provider shall include an cost estimate of what its costs would be to coordinate the distributed resource project with each affected system with potential for violations if coordination of the affected system study is an option under the rules, regulations, laws, or procedures governing the affected system operator. If coordination is an option, then Ithe interconnection customer shall respond to the interconnection provider's notification within five business days, stating whether the interconnection provider is to act as liaison between the interconnection customer and each affected system that shows a potential for violations.
 - A) If the interconnection customer notifies the interconnection provider it is to act as liaison between the interconnection customer and the affected system, within <u>fivetwenty</u> business days after receipt of notification, the

interconnection provider shall inform the affected system of the distributed resource, in accordance with interconnection notification protocols <u>and the rules, regulations, laws, or</u> <u>procedures governing the affected system operator</u>.

- B) Within five business days from the interconnection provider's notification of a potential for violations on an affected system, the interconnection provider shall send the interconnection customer an affected system study agreement, including an outline of the responsibilities of interconnection provider and interconnection customer in coordinating the affected system study with the affected system operatorscope of the study and an estimate of the cost of the affected system study. In order to remain under consideration for interconnection, the interconnection customer must return an executed affected system study agreement and reimburse interconnection provider for any charges assessed by affected system operator within 20 business days of interconnection provider's receipt of charges from affected system operator.a deposit of the equivalent of half the estimated cost of the impact study within 30 business days. Interconnection customers must pay any study costs that exceed the deposit within 20 business days after receipt of the invoice or resolution of any dispute up to the binding maximum cost estimate. If the deposit exceeds the invoiced costs, the interconnection provider shall return the excess within 20 business days after receipt of the invoice without interest.
- C) The interconnection provider shall coordinate the affected system study, and shall attempt to convey results to the interconnection customer within 45 business days after receipt of the authorized affected system study agreement and deposit.
- D) No later than 30 days after receipt of the results of the affected system study from interconnection provider, the interconnection customer must notify the interconnection provider of its intention to proceed. If the interconnection customer chooses to proceed, the interconnection provider shall send the interconnection customer a facilities study agreement in accordance with Section XXX.120 or an interconnection agreement.

4) Where a feasibility/impact study indicates potential for affected system violations, and the interconnection customer decides to coordinate all aspects of the distributed resource interconnection with the affected system, the interconnection customer must apply to the affected system, within twenty business days, -in accordance with regulations that govern interconnections to the affected system. In these cases, tThe interconnection customer shall cause the interconnection provider to receive a copy of the affected system's study results as soon as they are available. Within 30 business days after receipt of the results of the affected system study, the interconnection customer must notify the interconnection provider of its intention to proceed. If the interconnection customer chooses to proceed, the interconnection provider shall send the interconnection customer a facilities study agreement in with Section XXX.120 or an interconnection accordance agreement.

Section XXX.120 Facilities Study

- The facilities study determines the need for specific modifications to the a) transmission and distributionelectric system(s) necessary to interconnect the distributed resource, and to determine the cost of theany necessary modifications if any. The interconnection provider shall also suggest alternative approaches to the interconnection customer's proposed distributed resource interconnection if the interconnection provider believesidentifies alternative approaches that would interconnection costs or provide other benefits. If the feasibility/impact study determines that no electric distribution system interconnection facilities are required, the facilities study shall not be required, and the project shall proceed directly to the execution of an interconnection agreement.
- b) A facilities study agreement shall be transmitted to the interconnection customer with the feasibility/impact study report. The facilities study agreement shall include an outline of the scope of the study and an maximum binding cost estimate of the costs to perform the facilities study. The cost estimate shall include a summary of the estimated professional time necessary to complete the facilities study. The facilities study agreement shall provide the interconnection customer with the option to designate the cost estimate as binding or choose a final true up of the cost estimate with actual costs upon completion of the study. When the actual cost of the facilities study is below the cost estimate, the interconnection provider shall refund the difference to the interconnection customer without interest. In order to remain under consideration for interconnection. Within 30 business days of receipt of the facilities study

agreement, the interconnection customer must return the an executed facilities study agreement with payment of the estimated cost of the facilities study. The interconnection customer shall also indicate whether payment is for a binding cost estimate or subject to a final true up with actual costs upon completion of the study. Or a request for an extension of time within 30 business days after receipt of the facilities study agreement. The interconnection provider may require a deposit of the equivalent of 50% of the maximum binding estimated cost of the facilities study when the interconnection customer returns the executed facilities study agreement.

- High voltage transmission system and/or electric power distribution c) system interconnection design for any required interconnection facilities and/or system modifications shall be performed under a facilities study agreement between the interconnection customer and the interconnection provider. The interconnection provider may contract with consultants, including contractors acting on behalf of the interconnection provider, to perform the some or all of the activities required under the facilities study The interconnection customer and the interconnection provider may reach agreement allowing the interconnection customer to separately arrange for the design of some or all of the required interconnection facilities. If the interconnection customer arranges for the design of some or all of the required interconnection facilities, facility design shall be reviewed and/or modified prior to acceptance by the interconnection provider, under the provisions of the facilities study agreement. If the parties agree to separately arrange for design and construction, the interconnection providers shall make sufficient information available to the interconnection customer to permit the interconnection customer to obtain an independent design and cost estimate for any necessary facilities.
- d) Whether system upgrades are required or the required facilities are limited to interconnection facilities, the facilities study shall be completed within 45 business days after the <u>interconnection provider's</u> receipt of <u>thean</u> <u>executed</u> facilities study agreement.
- e) Where system modifications or additional interconnection facilities are required to permit the interconnection of a distributed resource, the interconnection customer shall bear the cost of the system upgrades or interconnection facilities as determined by the facilities study and at no more than the estimated binding maximum cost provided for in the facilities study agreement. The interconnection customer may be credited for the cost of system or facility modifications or such costs may be offset by mutual agreement with subsequent interconnection customers, or by other laws, rules, tariffs, or billing experiments.

f) An interconnection provider may propose to group facilities required for more than one interconnection customer addition in order to minimize facilities costs through economies of scale, but any interconnection customer may require the installation of facilities required for its own system if it is willing to pay the costs of those facilities.

Section XXX.130 Compliance

No later than 30 days after the effective date of this —Part as amended, each interconnection provider shall file a tariff or tariffs for interconnection and parallel operation of distributed generation equipmentresources in conformance with the provisions of this —Part. The utility shall file a new tariff or a modification of an existing tariff. Any modifications of existing tariffs or offerings of new tariff filingss relating to this subsection shall be consistent with this —Part. Concurrent with the tariff filing required by this section, each utility shall submit:

- a) an initial review fee schedule and all supporting cost data for the fees;
- b) an interconnection agreement in form of the agreement attached as Appendix A; and
- c) standard applications for interconnection and parallel operation of distributed generation in the form of the applications in Appendices B and C.

Section XXX.140 Designation of Interconnection Provider Contact Persons

- a) The interconnection provider and interconnection customer shall designate a person or persons who shall serve as their respective interconnection contacts for all matters related to distributed resource interconnection.
- b) Each interconnection provider shall identify its distributed resource contact person to the Illinois Commerce Commission's Director of the Consumer Services Division and Director of the Energy Division.
- c) Each interconnection provider shall provide convenient access through its internet web site to the names, telephone numbers, mailing addresses and electronic mail addresses of its distributed resource contact employees or office.

Section XXX.150 All Reasonable Efforts

The interconnection provider shall make all reasonable efforts to meet all time frames provided in this— Part unless the interconnection provider and the interconnection customer mutually agree to a different schedule. The interconnection provider shall make all reasonable efforts to complete system modifications on or before the estimated deadline for completion. If an interconnection provider cannot meet a deadline provided in this Part, including deadlines provided in agreements, it shall notify the interconnection customer in writing no later than three business days after the deadline has passed. The notification shall explain the reason for the failure to meet the deadline and provide an estimated time by which it shall complete the applicable interconnection procedure. The interconnection provider shall also include the notification as well as any other relevant materials in an informational filing with the Illinois Commerce Commission no later than seven business days after notification is provided to the interconnection customer. Informational filings shall be filed with the Chief Clerk's Office and copies shall be sent to the Director of the Consumer Services Division and the Director of the Energy Division.

Section XXX.160 Metering

Any metering necessitated by the use of the distributed resource shall be installed in accordance with state regulatory requirements and interconnection provider's electric tariffs. <u>Unless mutually agreed to between interconnection customer and interconnection provider, interconnection provider shall not require installation of a meter on distributed resources with a nameplate capacity rating of 100 KW or less.</u>

Section XXX.170 Installation, and Commissioning, and Testing

Upon Within 20 business days of the execution of an interconnection a) agreement, the interconnection customer shall provide the interconnection provider with an estimate of the date on which the distributed resource shall be operational. The estimated date shall be no later than the latter of 18 months after the date that the interconnection agreement was executed or 18 months after the date that system or facility modifications were completed by the interconnection provider. Installation of the interconnection customer's distributed resource shall be completed as specified in the standardized application, the interconnection agreement, and any studies indicating a need to modify the interconnection customer's distributed resource. The interconnection customer shall inform the interconnection provider in writing when the installation of the distributed resource is complete. If the customer fails to install and inform the interconnection provider of the installation within the time limits specified in this subsection, the interconnection customer must reapply for interconnection before interconnection can take place unless an extension on the deadline to interconnect is mutually agreed to between the interconnection customer and the interconnection provider. However, failure of the interconnection customer to meet the estimated date of operation shall not require reapplication for interconnection.

- b) Commissioning tests of an interconnection customer's installed distributed resource shall be performed pursuant to applicable codes and standards. The interconnection provider shall list all testing requirements in the interconnection agreement. The interconnection customer provider shall be given the interconnection provider 10 business days written notice, or as otherwiseanother mutually agreed upon timeframeto by the parties, of the tests and Interconnection provider shall have the right to be present to complete the interconnection, inspect the interconnection customer's distributed resource for compliance with applicable codes and standards, and witness the commissioning tests. The interconnection provider shall assess no charges related to the initial inspection.
- c) If the inspection of the interconnection customer's distributed resource does not result in a finding that the distributed resource is in compliance with applicable codes and standards and the executed agreement, the interconnection provider shall provide written notification to the interconnection customer explaining why the distributed resource was not in compliance within five business days of the inspection. Within 30 business days of notification of non-compliance or another mutually agreed upon time, the Once the interconnection customer has shall addressed the non-compliance in the notification, the interconnection customer shall provide the interconnection provider with 10 business days notice, unless otherwise mutually agreed to between interconnection customer and notify the interconnection provider, that it is prepared for another inspection.
- d) The interconnection provider shall test interconnection customer equipment no more frequently than it tests its own equipment.

Section XXX.180 Reporting Requirements

- a) Each interconnection provider shall maintain records concerning applications received for interconnection and parallel operation of distributed generation. Such records shall include the date each application is received, <u>all</u> documents generated in the course of processing each application, correspondence regarding each application, and the final disposition of each application.
- b) The interconnection provider shall make available information, including single-line diagrams of all existing interconnections unless the diagrams are redundant, other details of existing interconnections, and generic single-line diagrams, on the interconnection provider's Internet web site.

Such information shall include, but not be limited to, the number, type, and location of relays, voltage level at the point of interconnection and on adjacent lines, size and type of generator, metering, and inverters. Nothing shall preclude the interconnection customer from submitting, and the interconnection provider from approving, interconnection applications that propose interconnections that vary from the information listed on the interconnection provider's web site.

Section XXX.190 Complaint Procedures

Complaints alleging violations of <u>this</u> Part shall be filed pursuant to 83 III. Adm. Code 200.